

Mortality risk factors

Mortality risks were the second major category of risks to lynx identified in the LCAS. A *mortality risk* is something that increases the likelihood lynx will be killed.

Direct mortality can be caused by:

- ♦ Vehicle collisions on highways
- ♦ Predation by other species
- ♦ Predator control activities
- ♦ Shooting
- ♦ Trapping

Most mortality is caused indirectly by starvation from lack of prey, as discussed previously.

Vehicle collisions on highways

Major high-use highways such as I-90, I-15, US-2, US-12 and US-93 may result in lynx deaths from vehicle collisions (Ruediger et al. 2000). The effects of highways on lynx are discussed with movement risks beginning on the next page.

Predation by other species

Predation on lynx kittens by coyotes, grey wolves, mountain lions, bobcats and birds of prey has been inferred or documented throughout the range of the lynx (Ruediger et al. 2000).

Snow compacted by snowmobiling, skiing, etc., may facilitate the movement

of other predators into lynx habitat (Buskirk et al. 2000a). The effects of snow compaction on lynx were previously discussed with competition risks.

Predator control, shooting & trapping

The USDA Wildlife Services traps, shoots and poisons predators on federal lands, usually on domestic livestock allotments and sometimes inside lynx habitat. While these efforts are directed at specific species or offending animals, occasionally a lynx may be affected. Wildlife Services captured and released a lynx in Idaho in 1991 but there have been no other recent reports (Ruediger et al. 2000). People on adjacent private lands may conduct similar efforts.

Lynx trapping is not permitted in any of the states in the amendment area; however, lynx may be trapped incidentally. Lynx could be shot mistakenly by legal hunters or illegally by poachers.

This amendment does not address predator control, shooting or trapping because they are outside the jurisdiction of the FS and BLM. For more discussion, see the Chapter 2 section, *Management direction considered, but not in detail*.

Movement risk factors

Risks to lynx movement were the third major category of lynx risk factors identified in the LCAS. A *movement risk* is anything that increases the likelihood lynx movements will be impeded or inhibited.

Lynx daily movements vary up to six miles. Lynx are known to regularly explore from nine to 25 miles beyond their home ranges, and to make long-distance moves of up to 600 miles when prey is scarce (Ruediger et al. 2000).

Recent genetic work has shown that lynx throughout western North America are closely related (Schwartz et al. 2002), indicating populations have been well enough connected to maintain close kinship. Lynx seem to prefer to move through continuous forest, frequently use ridges, saddles and riparian areas (Koehler 1990, Staples 1995) and have been observed to avoid large openings (Ruggerio et al. 2000a).

At this time no natural or human-caused barriers that effectively prohibit movement of lynx between Canada and the northern Rockies have been identified (USDI FWS, 2003 p 40097).

The riparian corridors required by INFISH and PACFISH provide connectivity by making continuous forest or shrub cover available (Hickenbottom et al. 1999). INFISH and PACFISH apply to amendment area NFs west of the Continental Divide and BLM lands in Idaho and Utah.

As part of their Conservation Agreements, the agencies agreed to identify linkage

areas. *Linkage areas* are places that connect blocks of lynx habitat, and have been identified for Idaho, Montana, Wyoming and Utah. Federal, state and tribal governments – including highway agencies – were involved. Figure 1-1 identifies linkage areas in the amendment area; Appendix B documents the criteria used.

Movement risks

Movement risks from grazing

Livestock grazing may change, reduce or eliminate snowshoe hare habitat in quaking aspen, willows and riparian areas. In shrub-steppe habitat, grazing may change plant composition where shrubs provide cover and connectivity between blocks of lynx habitat. These effects are likely to be localized since there is no evidence grazing poses a threat to lynx populations as a whole (USDI FWS, 2003).

Movement risks from highways

Highways can alter landscapes by fragmenting large tracts of land. The degree of impact increases as highways are upgraded from two lanes. However, no information exists to determine the level that traffic volume or roadway design affects lynx (USDI FWS, 2003).

Major high-use highways such as I-90, I-15, US-2, US-12, US-95 and US-93, state highways 75 in Idaho and 83 in Montana, and US-14, US-26 and US-189 in Wyoming, may impede lynx movement across the landscape (Ruediger et al. 2000). While the FS and BLM don't have

authority over these highways, they can influence the consideration of wildlife crossings if a right-of-way is involved.

Most state transportation departments are considering ways to provide wildlife crossings during highway construction and reconstruction projects. See the transportation report in the Project Record for further detail.

Parts of US-95 in Idaho and US-2 and US-93 in Montana were rebuilt in the last decade; none of the work was done where lynx linkage areas have been identified.

Movement risks from forest roads

As the standard of road increases from gravel to two-lane highway, traffic speeds and volume increase and can affect lynx movements. During the last decade, about 15 miles of two-lane roads were paved in the amendment area. There is no evidence that lynx avoid or are displaced by unpaved roads; therefore unpaved roads are not considered a threat to lynx movement (USDI FWS 2003).

In 2001, the FS established a detailed

Roads Analysis policy (36 CFR 212.5(2)) to decide which roads to keep and which to decommission. Before any road is upgraded, a Roads Analysis must be completed. Lynx needs would be considered as part of this analysis.

Movement risks from land ownership patterns

Private land development, especially four season resorts and developments along road corridors in mountain valleys, may fragment habitat and impede lynx movement (Ruediger et al. 2000).

Movement risks from recreation

Winter developed recreation

Downhill and cross-country ski areas represent only a small fraction of lynx habitat – less than 30,000 of 18.5 million acres in the amendment area – but their location on north facing slopes, high seasonal and year-round use and associated developments may affect lynx movement (Ruediger et al. 2000). There are 18 downhill ski areas in lynx habitat in the amendment area.

Table 3-16. BA findings about whether existing plans manage habitat connectivity

	<u>Fully or substantially</u>	<u>Marginally</u>	<u>Does not</u>	<u>Unknown or n/a</u>
FS plans (20 in amendment area)				
Connectivity	40%	50%	10%	---
Coordinating connectivity & land adjustments	20%	60%	20%	---
Land adjustments	---	50%	50%	---
Developed recreation†	5%	---	95%	---
BLM plans (nine in amendment area)				
Connectivity	22%	78%	---	---
Coordinating connectivity & land adjustments	---	78%	22%	---
Land adjustments	---	67%	33%	---
Developed recreation †	---	11%	78%	11%

†Year-round developed recreation was evaluated in the BA

A survey of two ski areas in southern Canada showed that skiers did not seem to keep lynx from occupying and using the areas, and that lynx did not always run away from people (Creel et al. 2002). However, what level of human presence lynx can tolerate has not yet been determined (Roe et al. 2000).

Dispersed recreation

It's unlikely that spring, summer or fall recreation sites, such as campgrounds, affect lynx because lynx appear to exhibit a low susceptibility to displacement by humans, even though there's probably some level of activity that would cause lynx to move. Lynx also have more foraging opportunities during these seasons. It's possible lynx could be displaced by activity near denning sites (Ruediger et al. 2000). No management direction was developed for spring, summer or fall recreation because of the low likelihood of conflicts. Therefore, it's not discussed further.

Movement risks under Alternative A, no action

Under the no-action alternative, management direction for the conservation of lynx would not be incorporated into existing plans. The existing direction would continue.

Highways under Alternative A

Two highways in linkage areas could be expanded from two to four lanes during the next decade – US-95 in Idaho and US-

30 in Wyoming. Wildlife crossings are being considered for these upgrades even though existing plans do not require them.

Roads under Alternative A

About 45 miles of two-lane roads on NF lands are planned for paving during the next decade – see Table 3-17. Existing plans contain no requirements to consider wildlife crossings, but a Roads Analysis would have to be done to consider resource needs before upgrading. If wildlife crossings are not incorporated, lynx movement could be negatively affected by increasing the speed and traffic volumes on these roads. About 240 miles of road are planned for upgrading. Upgrading could increase traffic speeds and volumes, although not to the same degree as paving.

Land ownership under Alternative A

Existing plans require considering the effects on threatened and endangered species in land ownership adjustments.

About 375,000 acres may be considered for acquisition in the amendment area during the next decade. Many acres are in lynx habitat or linkage areas. Acquiring these lands would improve federal landownership patterns.

It's also possible that when acquiring desirable lands, some lynx habitat or linkage areas could be disposed of, which could negatively affect lynx habitat connectivity in some situations.

Table 3-17. Forest road management plans in lynx habitat

<u>Category of road</u>	<u>Miles</u>
Two or more lanes, planned to be paved during the next decade	45
Roads planned to be upgraded during the next five years	240

Winter developed recreation under Alternative A
Twelve downhill ski areas have expansions planned during the next decade. One new ski area is being considered. Potential developments and expansions could result in losing habitat. Habitat fragmentation may increase and could impede the movement of lynx across the landscape.

Movement risks under Alternatives B, C, D & E

Grazing

Standard LINK S2 says to manage livestock grazing in shrub steppe habitat to provide cover and connectivity between blocks of lynx habitat.

Under Alternative E, standard LINK S2 is changed to a less restrictive guideline LINK G2. This change could result in some local reduction of cover and connectivity and may affect an individual lynx that is moving between blocks of lynx habitat. However, there is no evidence that grazing affects lynx populations as a whole (USDI FWS, 2003). This localized effect would most likely be located on the east side of the northern Rockies because direction included in the INFISH and PACFISH amendments require protection of riparian areas. Riparian areas are often used by lynx for travel.

Roads and highways

- ♦ *Objectives ALL O1, HU O6 and LINK O1* describe project design that considers how to maintain and provide for connectivity
- ♦ *Standards ALL S1, LINK S1* are discussed below. *Guideline ALL G1* requires project planners to consider using techniques to avoid or reduce

adverse effects on lynx during highway construction and reconstruction

- ♦ Under Alternative B, *Guideline HU G6* discourages upgrading roads in lynx habitat where the result would be increased traffic volumes or speeds
- ♦ Under Alternatives C, D and E, *Guideline HU G6* says mitigation to maintain lynx movement corridors should be considered when upgrades result in increased traffic volumes or speeds

Currently, wildlife needs are frequently considered in road and highway development. Adding Guidelines ALL G1 and HU G6 to existing plans would make sure they were considered.

Standards ALL S1 and LINK S1 should reduce the effects of habitat fragmentation from roads and highways, and provide for the movement and dispersal of lynx throughout the amendment area.

Land ownership under Alternatives B, C, D & E

- ♦ Objective LINK O1 encourages the agencies to work with other landowners to find ways to reduce the potential for adverse effects in linkage areas
- ♦ Guideline LINK G1 encourages the agencies to retain habitat in linkage areas

Alternatives B, C, D and E should reduce habitat fragmentation from private land development and patterns of scattered land ownership, and enable lynx to move and disperse throughout the amendment area.

*Winter developed recreation under
Alternatives B, C, D & E*

- ♦ Objectives ALL O1, HU O2, HU O3 and HU O4 encourage maintaining or restoring lynx connectivity
- ♦ Standard ALL S1 requires new or expanded permanent developments to maintain connectivity

Under Alternative B, Standard HU S2 requires lynx diurnal security habitat to be provided where needed, although it's not found lacking everywhere. Under Alternatives C, D and E, this direction is changed to a guideline.

- ♦ Guidelines HU G2 and HU G3 say lynx movement must be considered

when designing developed recreation sites

These objectives, standards and guidelines do not prohibit new developments or prohibit expanding existing developments. However, they do require considering lynx needs in facility design and operations. As a result, habitat connectivity would be provided in new or expanded operations, and lynx would more likely be able to use these areas and move unimpeded throughout the landscape under Alternatives B, C, D and E.

Standard ALL S2

Alternative D

Alternative D contains Standard ALL S2 that would allow a project to deviate from one or more lynx standards if a determination of “not likely to adversely affect” lynx has been made, subject both to ESA requirements and to approval by the BLM state director or Regional Forester – see Table 2-1. The use of the standard would be monitored.

The BO says,

... for most agency actions, noncompliance with the standards in the LCAS increases the likelihood that actions would adversely affect lynx.

Possible effects include:

- ♦ Some projects may result in improving or maintaining winter snowshoe hare habitat over the long term
- ♦ Mandatory standards might not be implemented as intended, or standards might be applied less consistently throughout the amendment area because of the many administrative jurisdictions and field offices
- ♦ Standard ALL S2 provides a less reliable regulatory mechanism because of the uncertainty of its application
- ♦ It may be more difficult to determine cumulative effects at the project level for larger scales such as metapopulations

Alternative E

Alternative E also contains Standard ALL S2. Under Alternative E, Standard ALL S2 would allow a project to deviate from one or more lynx standards if the project has short-term adverse effects on lynx, as long as it has long-term benefits to lynx and its habitat, subject to ESA requirements but without a higher level of review. The use of the standard would be monitored, as with Alternative D.

The possible effects are similar to those described under Alternative D, plus:

- ♦ Projects would have adverse effects on lynx and require formal consultation with FWS
- ♦ Given the current state of knowledge, it may be difficult to determine where, when and how short-term adverse effects could be offset by long-term improvements in lynx habitat, both inside an LAU and over larger scales
- ♦ Short-term adverse effects on individual lynx could occur, because projects with short-term adverse effects could be concentrated in one LAU and combined with projects with long-term benefits in other LAUs
- ♦ The lack of higher-level review may lead to a greater degree of inconsistency in how standards are applied

Effects summary

Table 3-18 summarizes how the alternatives address lynx risk factors.

Alternative A

There would be no change in management direction under Alternative A.

Consequently, there would be no change in effects from those identified in the BA for existing plans.

The quantity and quality of winter snowshoe hare foraging habitat would likely decline due to the lack of

management direction to:

- ♦ Provide a distribution of age classes
- ♦ Restrict activities that reduce winter snowshoe hare forage
- ♦ Promote actions that create forage where it's lacking

Alternative A could reduce the quantity and quality of high-density winter snowshoe hare habitat by 14 percent during the next decade. The reduction would be the result of precommercial thinning, fuel treatment and whitebark

Table 3–18. How the alternatives address the LCAS risk factors

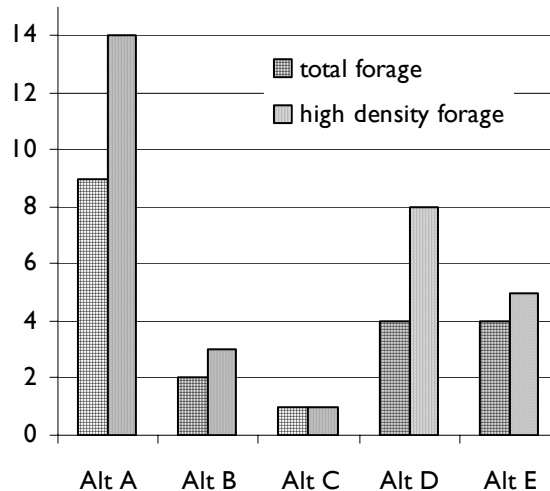
	<u>Alt A</u>	<u>Alt B</u>	<u>Alt C</u>	<u>Alt D</u>	<u>Alt E</u>
Incorporates regulatory mechanisms	N	Y	Y	P	P
Risk factors relating to quantity & quality of foraging habitat					
Direction limits amount of unsuitable habitat	N	Y	P	P	P
Direction limits timber harvest creating unsuitable habitat	N	Y	P	N	N
Direction limits PCT in foraging habitat	N	Y	Y	P	P
Direction limits other vegetation projects in foraging habitat	N	N	Y	P	P
Direction for fire	N	Y	Y	Y	Y
Direction addresses grazing	P	Y	Y	Y	P
Risk factors relating to quantity & quality of denning habitat					
Direction retains ten percent denning habitat	P	Y	Y	Y	P
Direction defers management activities in potential denning habitat	N	Y	Y	P	P
Direction limits salvage of small areas of dead/dying trees	N	Y	Y	P	P
Risk factors relating to competition from predators					
Direction for over-the-snow winter recreation	N	Y	P	P	P
Direction for ski areas	N	Y	Y	Y	Y
Direction for minerals and energy development	N	Y	Y	Y	P
Direction for roads	P	Y	Y	Y	Y
Risk factors relating to movement & connectivity					
Direction for highways	N	Y	Y	Y	Y
Direction for land acquisition	N	Y	Y	Y	Y
Direction for connectivity	P	Y	Y	Y	Y

N = No management direction or only very limited direction included

P = Partial, some management direction exists or would be included to limit or avoid some effects caused by the risk factor

Y = Yes, includes enough management direction to limit or avoid effects caused by the risk factor

Figure 3-5. Percent of winter snowshoe hare habitat affected by the alternatives



pine restoration. Winter snowshoe hare habitat in young regenerating forests could be reduced by almost one-quarter if all acres were thinned. Considering both low- and high-density forage, then only about nine percent could be reduced – see Figure 3-5.

An adequate amount of denning habitat may not be provided on those units that lack management direction to provide old growth or coarse woody debris. Denning habitat would likely be reduced in some places.

Existing plans would allow snow compacting activities to occur in new places, expanding the area where competition with other predators may occur. This expansion could affect individual lynx; however there is no evidence that if competition exists between lynx and competitors that it affects lynx at a population level (USDI FWS 2003).

Lynx movement may be restricted due to lack of management direction to provide habitat connectivity. No direction would be provided for:

- ♦ Managing roads, highways and development, or
- ♦ Managing grazing to provide cover, such as in riparian areas

Those plans already amended by PACFISH and INFISH would provide for lynx movement to some degree. Grazing in areas where plans have not been amended by PACFISH and INFISH may affect lynx in local areas by reducing habitat cover but there is no evidence that grazing poses a threat to lynx populations as a whole.

In summary, since specific management direction that address threats to lynx populations (specifically direction for timber harvest, thinning and fire suppression) is lacking in existing plans, adverse effects on lynx populations would continue. The plans also lack

management direction in some areas for grazing, minerals, roads and over-the-snow use; however, these specific risks are likely to only affect individual lynx, not populations as a whole.

Alternative B

Alternative B would incorporate management direction into existing plans to reduce or eliminate almost all known adverse effects on lynx populations and individuals and contribute to conserving the species.

Alternative B would result in improved forage habitat for lynx in young regenerating forests. Alternative B would add management direction to:

- ♦ Provide a distribution of age classes
- ♦ Restrict precommercial thinning
- ♦ Promote actions that create forage where it's lacking

Alternative B would restrict precommercial thinning, the major activity that occurs in young regenerating forests, but does not restrict it in multistoried forests. Alternative B could reduce the quantity and quality of high-density winter snowshoe hare forage by three percent during the next decade, primarily the result of fuel treatments and whitebark pine restoration in multistoried forests – see Figure 3-5. Only a limited reduction would occur in young regenerating forests, since most precommercial thinning is restricted. Considering both low- and high-density forage, then about two percent could be affected.

Alternative B would incorporate management direction for denning habitat

that would protect denning habitat and den sites.

Grooming would not be allowed to expand beyond existing designated routes, and designated over-the-snow routes would not be allowed to expand into new areas. Competing predators would be limited to existing compacted areas, until more information about the effects of competitors using compacted trails can be gathered and analyzed. Alternative B would limit the potential effect on individual lynx.

Lynx habitat connectivity would be improved by providing management direction to retain cover adjacent to riparian areas and to coordinate with other landowners.

In summary, management direction to address threats to lynx populations, specifically direction for timber harvest and thinning, would be incorporated into existing plans, but multistoried foraging habitat still could be reduced.

Alternative B also would add management direction for grazing, minerals, roads and over-the-snow use which would minimize potential effects of these activities on individual lynx.

Alternative C

Alternative C also would incorporate management direction to reduce or eliminate adverse effects on lynx and contribute to conserving the species.

Alternative C would result in improved winter snowshoe hare habitat by adding management direction to:

- ♦ Provide a distribution of forest age classes
- ♦ Restrict most vegetation management projects in forage habitat
- ♦ Promote actions that create forage where it's lacking in young regenerating forests

Less than one percent of winter snowshoe hare habitat in young regenerating and multistoried forests could be reduced during the next decade by the activities allowed by Standards VEG S5 and S6 – see Figures 3-3 and 3-4.

Alternative C would expand the area to which Standard VEG S1 is applied, to a fixed combination of adjacent LAUs, to better reflect historic disturbance patterns. This may affect individual lynx because every forest age class may not be represented in a single LAU, but also may result in a long-term beneficial effect on overall populations because it would better reflect historic disturbance patterns.

Changing Standard VEG S2 to a guideline would provide direction to consider the amount of timber harvest that could create unsuitable habitat, even though timber harvest rarely creates an overabundance of unsuitable habitat (Hillis et al. 2003).

Alternative C would incorporate direction for denning habitat that would protect denning habitat and den sites.

Alternative C would incorporate direction for snow compaction. Standard HU S1 also would be applied to multiple LAUs, and would allow grooming and designated routes to expand into places already compacted. Alternative C would

not directly result in new places with human-compacted snow.

Alternative C would incorporate direction for habitat connectivity.

In summary, Alternative C would add management direction to address threats to lynx populations, specifically direction for timber harvest and thinning. However the analysis size for considering unsuitable habitat would be expanded, which could affect individual lynx, but may be beneficial for the population as a whole. Nearly all the winter snowshoe hare habitat would be protected.

Alternative C also adds management direction for grazing, minerals, and roads which would minimize potential effects of these activities on individual lynx. The analysis boundary for over-the-snow use would be expanded which could affect some individual lynx.

Alternative D

Alternative D would incorporate management direction to reduce or eliminate many adverse effects on lynx and contribute to conserving the species.

Alternative D would add direction to distribute forest age classes, but under Standard VEG S1 expands the size of analysis area even more to allow considering historic disturbance patterns. This change could result in adverse effects on individual lynx, but is likely to provide long-term beneficial effects on lynx populations as a whole.

Alternative D could reduce the amount of quality winter snowshoe hare foraging habitat compared to Alternatives B and C

because Standards VEG S5 and VEG S6 allow more activities in hare habitat. During the next decade, Alternative D could reduce the amount of quality forage by eight percent as a result of precommercial thinning and whitebark pine restoration – see Figure 3-5.

About 15 percent of the winter snowshoe hare habitat in young regenerating forests could be affected by precommercial thinning, assuming thinning always reduced habitat quality regardless of the thinning prescription. Considering both low- and high-density forage, about four percent could be affected, which could adversely affect lynx.

Alternative D provides direction to retain denning habitat – but changing Standard VEG S4 to a guideline could result in reducing the number of potential den sites.

Alternative D adds management direction for habitat connectivity.

In summary, Alternative D would add management direction to address threats to lynx populations, specifically direction for timber harvest and thinning. However some adverse effects would be allowed to occur. The analysis size for considering unsuitable habitat would be expanded which could affect individual lynx, but may be beneficial for the population as a whole. The quality and quantity of winter snowshoe hare habitat could be reduced by about seven percent.

Alternative D also adds management direction for grazing, minerals, and roads which would minimize potential effects of these activities on individual lynx. The

analysis boundary for over-the-snow use would be expanded which could affect some individual lynx.

Alternative E

Alternative E would incorporate management direction to reduce or eliminate many adverse effects on lynx and contribute to conserving the species.

Alternative E would add direction to distribute forest age classes, but under Standard VEG S1 expands the size of analysis area to allow considering historic disturbance patterns. This change could result in adverse effects on individual lynx, but is likely to provide long-term beneficial effects on lynx populations as a whole.

Alternative E could reduce high-density winter snowshoe hare habitat by five percent as a result of fuel treatment and whitebark pine restoration – see Figure 3-5. Considering both low- and high-density winter snowshoe hare habitat, then about four percent would be affected, which could adversely affect lynx. Some fuel treatments may result in long-term adverse effects if the structure and composition of vegetation is changed over the long term.

Alternative E provides direction to retain denning habitat – but changing Standard VEG S4 to a guideline could result in a reduced number of potential den sites.

Alternative E would permit short-term adverse effects on lynx, but only if there are long-term beneficial effects.

In summary, Alternative E would add management direction to address threats

to lynx populations but would allow some adverse effects to occur. The analysis size for considering unsuitable habitat would be expanded, which could negatively affect individual lynx but may be beneficial for the population as a whole. The quality and quantity of winter snowshoe hare habitat could be reduced by about five percent due to allowing fuel treatment and whitebark pine restoration activities to occur in winter snowshoe hare habitat.

Alternative E also adds management direction for grazing, minerals, and roads which would reduce potential effects of these activities on individual lynx. The management direction is changed from standards to less restrictive guidelines which could affect individual lynx if the guidelines are not followed; however this change would not affect lynx populations since these risks have been determined to not threaten the overall population of lynx.

Cumulative effects

Alternative A

Management actions allowed by existing plans in the developmental land allocations on federal lands have the potential to adversely affect lynx (Hickenbottom et al. 1999). Similarly, management practices on state, corporate and small private lands may present a risk to lynx persistence in the long term. Preliminary research conducted on privately-owned corporate timber lands in northwestern Montana show that such lands provide varying levels of snowshoe hare densities (abundant to low), depending on the timber harvest regime (USDI FWS, 2003).

The presence of major highways through the area, several large reservoirs and residential and urban development pose movement obstacles.

Management direction incorporated through the PACFISH and INFISH amendments, the OHV (off-highway vehicle) amendment, Healthy Forest Rangeland Initiative and Roadless Policy provides improved habitat conditions for lynx – see Appendix L. The two large national parks, Glacier and Yellowstone, provide large secure blocks of habitat.

Cumulatively, the past, present and reasonably foreseeable programmatic actions described in Appendix L would generally improve habitat conditions for lynx. However, since existing plans would still lack management direction to reduce threats to lynx, adverse effects would continue.

Alternatives B, C, D & E

The action alternatives would incorporate management direction – to varying degrees – that would reduce or eliminate adverse effects from management actions in the amendment area. However, Standard ALL S2 in Alternative E would permit short term adverse effects as long as there are long term beneficial effects.

Management direction would result in improved lynx habitat and connectivity. Cumulatively, this direction would have some beneficial effects on lynx. Activities on corporate and small private lands could still adversely affect lynx; however, the amendment requires considering activities on private land when evaluating the effects of projects on federal land.

Northern Rockies Geographic Area

Several NFs and BLM units in the geographic area are not included in this amendment. Some are currently revising their plans and would incorporate management direction for lynx. Others will be revising or amending plans in the near future and are considering the LCAS during project analysis – see Appendix D. The new direction should result in improved lynx habitat conditions.

United States

A similar amendment is going on in the Southern Rockies Geographic Area. Units in other geographic areas will amend or revise their plans in the next several years to incorporate lynx management direction. As these plans are updated, they should result in cumulative beneficial effects on lynx.
